Comment on Public Safety Aspects and Broadband

My name is Rebecca Ladew, and I live in Baltimore, MD. I have a Masters Degree in Instructional Technology from Towson University. I am associated with the Speech Communication Assistance by Telephone, Inc. started by Dr. Bob Segalman of California.

The ability and freedom to communicate with others, whether spoken or written, is something most people take for granted. People with communication disabilities were not able to communicate outside of their own immediate world until Telecommunications Relay Services (TRS) came along as a part of the Americans with Disabilities act, the ADA in 1990. Speech-to-Speech Relay, a form of TRS, made the use of the telephone system possible for people with speech disabilities. Now they can take care of routine matters such as making doctor?s appointments, making business calls, ordering pizza or Chinese food, calling friends and relatives, etc. Speech-to-Speech Relay has made even calling 9-1-1 for emergency situations possible.

There are two relay services that people with speech disabilities can utilized are Speech-To-Speech (STS) Relay and Hearing-Carry-Over (HCO) Relay. With Speech-To-Speech Relay you can use your voice and hear at the same time, but have a communication agent (CA) ?revoice? what you say verbatim --- like real time telephoning.

For Hearing-Carry-Over Relay the voice of the person with a speech disability is not heard, but that person can hear the party they called; and then the person with the speech disability can type back to the communication agent what they want to tell the other party. A TTY and a speakerphone are used for this type of relay service. We have petitioned the FCC to recognize Internet-based Speech-to-Speech Relay making it possible to use Video Assisted Speech (VAS) over BROADBAND and a computer. This is an open proceeding at this time.

People with speech disabilities have two things going against them when communicating verbally, and that is 1.) having trouble speaking, and 2.) being understood. Therefore, it is with much hesitation that people with speech disabilities use the telephone.

There are many varieties of speech disabilities, and many speech disabled individuals have other disabilities as well ? and some use wheelchairs. Some speech disabled individuals do not have the cognitive or manual skills to use a telephone or a computer keyboard. For those who lack the manual skills a pointer or stick may be used to strike a key on a computer keyboard ? this same method is also use to dial a number on a telephone. Also a switch may be used to manipulate signals on a computer screen.

A variety of adaptive augmentative communication equipment are available for people with speech

disabilities to use. Some are more sophisticated than some because you can program sentences that are apt to be used in everyday conversation, or you can even program an entire presentation/speech. With a click of a key the sentence or presentation/speech is spoken. Some of the more sophisticated adapted augmentative communication equipment can be connected to a cell phone for a direct call using certain programmable keys for certain conversations -- for example "Hey! How are you?" Users of this equipment often call through Speech-to-Speech Relay so the communications assistant can manage the call and insure that the other caller understands and respects the "turn-taking" process. If a user has a laptop/notebook computer that is designed specifically for users with speech disabilities who uses an adaptive augmentative communication device, the equipment will have PC wireless card making it possible for the speech disabled individual to make relay calls...

A simpler device that uses pictures or signals is used by those speech disabled individuals with cognitive disabilities. You can not connect these simpler devices to most cell phones, however these can be use when calling a relay service used by speech disabled individuals.

What I am attempting to explain is that it takes an enormous effect and time for a speech disabled individual to communicate. And, sometimes time is of an essence, such as when one is trying to access 9-1-1. A speech disabled individual, just like most people, becomes more excitable and frustrated in an emergency situation but this excitement makes their speech more difficult to understand. It would greatly enhance such opportunities to use video assisted speech over broadband.

There are typical barriers for people with speech disabilities:

1. Many individuals with a speech disability don?t have telephone equipment that they can use at all. They may need a speakerphone, headset, or TTY or other new emerging technologies. As Internet-based telephone use grows in the speech disability community, there will be more new kinds of equipment needed that is accessible and usable.

2. Many speech disabled individuals lack the dexterity to use the telephone even with special equipment. If special equipment is not made available for people with special needs ? such as people with speech disabilities -- there would be no access to telephone-type communication, even for calling 9-1-1.

3. Some speech disabled individuals can not afford to have telephone service much less broadband and computer.

4. If a speech disabled individual had to access 9-1-1 through Speech-To-Speech Relay (because

the 9-1-1 operator can?t understand their speech), the Speech-To-Speech Relay answer time may be too long for the emergency situation. Also, depending on the emergency situation accessing 9-1-1 via Hearing-Carry-Over Relay would also take a long time to explain the type of emergency situation because the communication agent would have to wait until the user typed his/her message ? and the user with a speech disability may be a slow typist. This could be made easier with video assisted communication over broadband and a computer.

5. Many speech disabled individuals do not think that the 9-1-1 operator will understand them and they do not know that they can access 9-1-1 through Speech-To-Speech Relay. They assume that 9-1-1 is not available to them. Much outreach is needed to include people with speech disabilities in using speech-to-speech relay services, much less for broadband.

Here are some ideas and recommendations to improve the use of broadband and speech-to-speech by people with speech disabilities:

1. There must be a national outreach program explaining -- extensively -- all relay services and the advantages that could be had by using video assisted speech over broadband. Some help in acquiring the needed equipment is essential for many people with speech disabilities ? indeed for all people with any kind of disability -- because they may be unemployed.

2. 9-1-1 center call takers should be trained to accept Speech-To-Speech Relay calls. If someone with a speech disability cannot be understood by the 9-1-1 operator, the operator should know to ask them to call back through Speech-To-Speech Relay. When (or if!) 9-1-1 centers go to the Next Generation 911 that is Internet-based, it will improve outcomes for people with speech disabilities when they can call using video to better get their emergency needs conveyed to the 911 center.

To sum up what has been said, and looking towards the future, all Americans need the ability to communicate using video assisted speech over broadband. Thank you for this opportunity to speak to you today.